of the role of Diatoms as the nutritive foundation of the various successions of life and activity among the micro-organisms.

In a careful and quantitative study of the plankton at the south end of the Isle of Man, it has been found that the Diatoms are foundational to the most rapid annual increase in life, which takes place in the Spring. Dinoflagellates furnish a well-marked, but less pronounced, maximum later, between April and August. Copepods have a maximum in early summer, usually later than that of the Dinoflagellates.

E. J. Allen and E. W. Nelson find that Diatoms are peculiarly satisfactory food in the artificial rearing of various marine larvae (sea-urchins, worms, mollusks). Several American students have found that most cultures in which Diatoms succeed prove prolific of Ameba.

A PECULIAR ACHLYA

W. C. Coker in Botanical Gazette for Nov. 1910, describes a new species of *Achyla* from North Carolina. He calls it *A. caroliniana*. The oogonial hyphae often branch in such a way as to suggest the three balls of the pawn-brokers shop. The oogonial hypha in about 1-6 of the oogonia protrudes into the oogonium in a way to suggest the action of an antheridium. These are the distinctive marks. This genus and other Saprolegniaceae present a most attractive field of study for the amateur as well as the professional student of aquatic botany. They are easily cultivated, are easily observed, and respond readily to changes of conditions.

TRANSFORMATION OF SPECIES OF VAUCHERIA

A French investigator has succeeded in producing a transformation in species of the common alga *Vaucheria* by varying the conditions of growth. *V. terrestris*, which showed as a pure culture when grown in the air, assumed all the characteristics of *V. geminata* when grown in an aqueous nutrient solution. By more vigorous nutrition the experimenter was able to effect a still further transformation into a form like no known form, in which there was a tendency for the oogonial branches to assume further vegetative divisions and later to develop into both oogonia and antheridia. In other words, a branch that normally produced female